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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 2

In the Matter of:

Tonawanda Coke Corporation Tonawanda, New York

COMPLIANCE ORDER

CAA-02-2010-1001

Respondent

In a proceeding under Section 113(a) of the Clean Air Act, 42 U.S.C. § 7413(a)

Statutory Authority

The United States Environmental Protection Agency (EPA) Region 2 Director of the Division of Enforcement and Compliance Assistance (Director) issues this COMPLIANCE ORDER (Order), pursuant to the Clean Air Act, 42 U.S.C. § 7401 et seq. (the Act or CAA), Section 113(a), 42 U.S.C. § 7413(a), to Tonawanda Coke Corporation (TCC or Respondent), the owner and/or operator of a by-product coking facility (Facility), located at 3875 River Road, Tonawanda, New York. The authority to find violations and issue compliance orders is delegated to the Director from the EPA Administrator, through the Regional Administrator.

Section 112 of the Act requires EPA to publish a list of hazardous air pollutants (HAPs), a list of categories and subcategories of major and area sources of the



listed HAPs, and to promulgate regulations establishing emission standards, referred to as the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for each category or subcategory of major and area sources of HAPs. ¹

Section 114(a)(1) of the Act authorizes EPA to require owners and operators of emission sources to provide information regarding such sources, establish and maintain records, make reports, sample emission points, and to install, use and maintain such monitoring equipment or methods, in order to determine whether any person is in violation of the Act or to carry out any provision of the Act (except the provisions of subchapter II of the Act).

Statutory, Regulatory and Permitting Background

- 1. Section 112(a)(1) of the Act defines "major source" as any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit ten (10) tons per year (tpy) or more of any HAP or twenty-five (25) tpy or more of any combination of HAPs.
 - 2. Section 112(b)(1) of the Act provides a list of the HAPs.
- 3. Section 112(c) of the Act requires EPA to publish a list of categories and subcategories of major and area sources of the listed HAPs.
- 4. Section 112(d)(1) of the Act requires EPA to promulgate regulations establishing emission standards for each category or subcategory of major and area sources of the listed HAPs.

¹ The Clean Air Act as Amended in 1990 provides a new approach to regulating emissions of HAPs under Section 112 of the Act. Prior to the enactment of the CAA Amendments of 1990 (Nov. 15, 1990), EPA promulgated risk-based NESHAP, which are codified in 40 C.F.R. Part 61. In accordance with the CAA as amended, EPA promulgated technology-based maximum achievable control technology (MACT) standards, which are codified in 40 C.F.R. Part 63.

- 5. Section 112(d)(2) of the Act, as amended November 15, 1990, provides that the emission standards promulgated under Section 112(d) and applicable to new or existing sources of HAPs shall require the maximum degree of reduction in emissions of the listed HAPs that EPA determines is achievable through application of specific measures, processes, methods, systems or techniques, taking into consideration the cost of achieving such emission reduction, among other things.
- 6. Section 112(d)(3) of the Act, as amended November 15, 1990, provides that, among other things, emission standards promulgated under Section 112(d) of the Act for existing sources in a category or subcategory, shall be at least as stringent as the average emission limitation achieved by the best performing 12 percent of the existing sources in the category or subcategory (for which EPA has emissions information and generally excluding sources that have achieved the lowest achievable emission rate as defined by Section 171 of the Act), or by the best performing five sources for categories or subcategories with fewer than thirty sources (for which EPA has or could reasonably obtain emissions information).
- 7. Section 113(a)(3) of the Act authorizes EPA to issue compliance orders, in accordance with the requirements in Section 113(a)(4) of the Act, to any person whenever, on the basis of any information available to EPA, EPA finds that such person has violated, or is in violation of, among other things, any requirement or prohibition of subchapters I or V of the Act, or any regulations promulgated pursuant to Sections 112 and 114 of the Act.
- 8. Section 114(a)(1)(A), (B), (C) and (G) of the Act authorizes EPA to require owners or operators of emission sources, on a one-time, periodic or continuous basis,

to establish and maintain such records, make such reports, and install, use and maintain such monitoring equipment, and use such audit procedures, or methods, and provide such other information as EPA may reasonably require.

- 9. Section 114(a)(1)(D) of the Act authorize EPA to require owners or operators of emission sources, on a one-time, periodic or continuous basis, to sample emission points in accordance with such procedures or methods, at such locations, at such intervals, during such periods and in such manner as EPA prescribes.
- 10. Section 302(e) of the Act defines "person" as "an individual, corporation, partnership, association, State, municipality, political subdivision of a State, and any agency, department, or instrumentality of the United States and any officer, agent, or employee thereof."

Applicable NESHAP Requirements

11. Pursuant to Sections 112 and 114 of the Act, EPA promulgated 40 C.F.R. Part 61, Subpart A, §§ 61.01 through 61.19 (NESHAP General Provisions).

NESHAP Subpart L

- 12. Pursuant to Sections 112 and 114 of the Act, EPA promulgated the "National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants," 40 C.F.R. Part 61, Subpart L, §§ 61.130 through 61.139 (NESHAP Subpart L). 54 Fed. Reg. 38,073 (September 14, 1989).
- 13. 40 C.F.R. § 61.130(a) provides that NESHAP Subpart L applies to specific sources at furnace and foundry coke by-product recovery plants, including but not limited to tar-intercepting sumps, and to the following equipment that are intended to operate in benzene service: pumps, valves, exhausters, pressure relief devices,

sampling connection systems, open-ended valves or lines, flanges or other connectors, and control devices or systems required by § 61.135.

- 14. 40 C.F.R. § 61.130(b) provides that NESHAP Subpart L also applies to excess ammonia-liquor storage tanks and light-oil storage tanks at furnace coke by-product recovery plants, among other sources.
- 15. 40 C.F.R. § 61.131 defines "coke by-product recovery plant" as "any plant designed and operated for the separation and recovery of coal tar derivatives (by-products) evolved from coal during the coking process of a coke oven battery."
- 16. 40 C.F.R. § 61.131 defines "equipment" as "each pump, valve, exhauster, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in benzene service."
- 17. 40 C.F.R. § 61.131 defines "excess ammonia-liquor storage tank" as "any tank, reservoir, or container used to collect or store a flushing liquor solution prior to ammonia or phenol recovery."
- 18. 40 C.F.R. § 61.131 defines "exhauster" as "a fan located between the inlet gas flange of the coke oven gas line that provides motive power for coke oven gases."
- 19. 40 C.F.R. § 61.131 defines "foundry coke" as "coke that is produced from raw materials with less than 26 percent volatile material by weight and that is subject to a coking period of 24 hours or more. Percent volatile material of the raw materials (by weight) is the weighted average percent volatile material of all raw materials (by weight) charged to the coke oven per coking cycle."

- 20. 40 C.F.R. § 61.131 defines "foundry coke by-product recovery plant" as "a coke by-product recovery plant connected to coke batteries whose annual coke production is at least 75 percent foundry coke."
- 21. 40 C.F.R. § 61.131 defines "furnace coke" as "coke produced in byproduct ovens that is not foundry coke."
- 22. 40 C.F.R. § 61.131 defines "furnace coke by-product recovery plant" as "a coke by-product recovery plant that is not a foundry coke by-product recovery plant."
- 23. 40 C.F.R. § 61.131 defines "in benzene service" as "a piece of equipment, other than an exhauster, that either contains or contacts a fluid (liquid or gas) that is at least 10 percent benzene by weight or any exhauster that either contains or contacts a fluid (liquid or gas) at least 1 percent benzene by weight as determined by the provisions of § 61.137(b). The provisions of § 61.137(b) also specify how to determine that a piece of equipment is not in benzene service."
- 24. 40 C.F.R. § 61.131 defines "light-oil storage tank" as "any tank, reservoir, or container used to collect or store crude or refined light-oil."
- 25. 40 C.F.R. § 61.131 defines "tar-intercepting sump" as "any tank, pit, or enclosure that serves to receive or separate tars and aqueous condensate discharged from the primary cooler. A tar-intercepting sump also may be known as a primary-cooler decanter."
- 26. Pursuant to 40 C.F.R. § 61.132(a)(1), each owner or operator of a furnace or a foundry coke by-product recovery plant shall enclose and seal all openings on each process vessel, tar storage tank, and tar-intercepting sump.

- 27. Pursuant to 40 C.F.R. § 61.132(a)(2), the owner or operator shall duct gases from each process vessel, tar storage tank, and tar-intercepting sump to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where the benzene in the gas will be recovered or destroyed. Section 61.132(a)(2) also provides that this control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 parts per million (ppm) above background and visual inspections, as determined by the methods specified in 40 C.F.R. § 61.245(c), except as otherwise provided in § 61.132(a). This system can be designed as a closed, positive pressure, gas blanketing system.
- 28. Pursuant to 40 C.F.R. § 61.132(b), following the installation of any control equipment used to meet the requirements of § 61.132(a), the owner or operator shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Method 21 (40 C.F.R. Part 60, Appendix A) and procedures specified in 40 C.F.R. § 61.245(c), and shall visually inspect each source (including sealing materials) and the ductwork of the control system for evidence of visible defects such as gaps or tears. Section 61.132(b) also provides that this monitoring and inspection shall be conducted on a semiannual basis and at any other time after the control system is repressurized with blanketing gas following removal of the cover or opening of the access hatch.
- 29. Pursuant to 40 C.F.R. § 61.132(d), each owner or operator of a furnace coke by-product recovery plant also shall comply with the requirements of § 61.132(a)

- through (c) for, among other sources, each excess ammonia-liquor storage tank and light-oil storage tank.
- 30. Pursuant to 40 C.F.R. § 61.135(a), each owner or operator of equipment in benzene service shall comply with the requirements of 40 C.F.R. Part 61, Subpart V (see Paragraphs 40 through 44, below), except as provided in § 61.135.
- 31. Pursuant to 40 C.F.R. § 61.135(c), each piece of equipment in benzene service to which NESHAP Subpart L applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment in benzene service.
- 32. Pursuant to 40 C.F.R. § 61.135(d), each exhauster shall be monitored quarterly to detect leaks by the methods specified in 40 C.F.R. § 61.245(b), except as provided in § 61.136(d) and § 61.135(e) through (g).
 - (1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
 - (2) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in § 61.242-10(a) and (b). A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- 33. Pursuant to 40 C.F.R. § 61.136(c), on the first January 1 after the first year that a plant's annual coke production is less than 75 percent foundry coke, the coke by-product recovery plant becomes a furnace coke by-product recovery plant and shall comply with § 61.132(d). Once a plant becomes a furnace coke by-product recovery plant, it will continue to be considered a furnace coke by-product recovery plant, regardless of the coke production in subsequent years.

- 34. Pursuant to 40 C.F.R. § 61.138(a), the following information pertaining to the design of control equipment installed to comply with §§ 61.132 through 61.134 shall be recorded and kept in a readily accessible location:
 - (1) Detailed schematics, design specifications, and piping and instrumentation diagrams; and
 - (2) The dates and descriptions of any changes in the design specifications.
- 35. Pursuant to 40 C.F.R. § 61.138(b), the following information pertaining to sources subject to § 61.132 and sources subject to § 61.133 shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection:
 - (1) The date of the inspection and the name of the inspector;
 - (2) A brief description of each visible defect in the source or control equipment and the method and date of repair of the defect;
 - (3) The presence of a leak, as measured using the method described in 40 C.F.R. § 61.245(c). The record shall include the date of attempted and actual repair and method of repair of the leak; and
 - (4) A brief description of any system abnormalities found during the annual maintenance inspection, the repairs made, the date of attempted repair, and the date of actual repair.
- 36. Pursuant to 40 C.F.R. § 61.138(e)(1), an owner or operator of any source to which NESHAP Subpart L applies shall submit a statement in writing notifying EPA

that the requirements of NESHAP Subpart L and 40 C.F.R. Part 61, Subpart V, have been implemented.

- 37. Pursuant to 40 C.F.R. § 61.138(e)(4), the statement is to contain the following information for each source:
 - (i) Type of source (e.g., a light-oil sump or pump);
 - (ii) For equipment in benzene service, equipment identification number and process unit identification: percent by weight benzene in the fluid at the equipment and process fluid state in the equipment (gas/vapor or liquid); and
 - (iii) Method of compliance with the standard (e.g., "gas blanketing," "monthly leak detection and repair," or "equipped with dual mechanical seals"). This includes whether the plant plans to be a furnace or foundry coke by-product recovery plant for the purposes of § 61.132(d).
- 38. Pursuant to 40 C.F.R. § 61.138(f), a report shall be submitted to EPA semiannually starting 6 months after the initial reports required in §§ 61.138(e) and 61.10, which includes the following information:
 - (1) For sources subject to § 61.132,
 - (i) a brief description of any visible defect in the source or ductwork;
 - (ii) the number of leaks detected and repaired; and
 - (iii) a brief description of any system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made;

- (2) For equipment in benzene service subject to § 61.135(a), the information required by 40 C.F.R. § 61.247(b);
- (3) For each exhauster subject to § 61.135 for each quarter during the semiannual reporting period,
 - (i) the number of exhausters for which leaks were detected as described in § 61.135(d) and (e)(5);
 - (ii) the number of exhausters for which leaks were repaired as required in § 61.135(d) and (e)(6); and
 - (iii) the results of performance tests to determine compliance with § 61.135(g) conducted within the semiannual reporting period;
- (4) A statement signed by the owner or operator stating whether all provisions of 40 C.F.R. Part 61, Subpart L, have been fulfilled during the semiannual reporting period;
- (5) For foundry coke by-product recovery plants, the annual coke production of both furnace and foundry coke, if determined during the reporting period; and
- (6) Revisions to items reported according to § 61.138(e) if changes have occurred since the initial report or subsequent revisions to the initial report.
- 39. Pursuant to 40 C.F.R. § 61.138(g), the first report submitted pursuant to § 61.138(e) shall include a reporting schedule stating the months that semiannual reports shall be submitted. Subsequent reports shall be submitted in accordance with

that schedule unless a revised schedule has been submitted in a previous semiannual report.

NESHAP Subpart V

40. Pursuant to Sections 112 and 114 of the Act, EPA promulgated the "National Emission Standard for Equipment Leaks (Fugitive Emission Sources),"
40 C.F.R. Part 61, Subpart V, §§ 61.240 through 61.247 (NESHAP Subpart V). 49 Fed. Reg. 23,513 (June 6, 1984).

Pursuant to 40 C.F.R. § 61.242-2(a)(1), each pump shall be monitored monitored in § 61.245(b), except as otherwise provided.

- Pursuant to 40 C.F.R. § 61.242-7(a), each valve shall be monitored monthly to detect leaks by the method specified in § 61.245(b) and shall comply with § 61.242-7(b) through (e), except as otherwise provided.
- 43. Pursuant to 40 C.F.R. § 61.245(b), the monitoring required by §§ 61.242, 61.243, 61.244 and 61.135, shall comply with, among other requirements, the following:
 - (1) Method 21 of Appendix A of 40 C.F.R. Part 60 (Method 21) (see Paragraphs 45 through 48, below);
 - (2) The detection instrument shall meet the performance criteria of Method 21;
 - (3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21; and
 - (4) Calibration gases shall be:

- (i) zero air (less than 10 parts per million (ppm) of hydrocarbon in air); and
- (ii) a mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
- 44. Pursuant to 40 C.F.R. § 61.246(b)(1), when each leak is detected as specified in 40 C.F.R. §§ 61.242-2, 61.242-7 and 61.135, a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

Method 21

- 45. Section 3.1 of Method 21 defines "calibration gas" as "the VOC compound used to adjust the instrument meter reading to a known value. The calibration gas is usually the reference compound at a known concentration approximately equal to the leak definition concentration."
- 46. Section 3.2 of Method 21 defines "calibration precision" as "the degree of agreement between measurements of the same known value, expressed as the relative percentage of the average difference between the meter readings and the known concentration to the known concentration."
- 47. Pursuant to Section 7.2 of Method 21, cylinder gases must be analyzed and certified by the manufacturer to be within 2 percent accuracy, and a shelf life must be specified.
- 48. Pursuant to Section 8.1.2.2 of Method 21, the calibration precision shall be equal to or less than 10 percent of the calibration gas value.

NESHAP Subpart FF

- 49. Pursuant to Sections 112 and 114 of the Act, EPA promulgated the "National Emission Standard for Benzene Waste Operations," 40 C.F.R. Part 61, Subpart FF, §§ 61.340 through 61.359 (NESHAP Subpart FF). 55 Fed. Reg. 8,346 (March 7, 1990).
- 50. 40 C.F.R. § 61.340 provides that NESHAP Subpart FF applies to owners or operators of coke by-product recovery plants, among other sources.
- 51. 40 C.F.R. § 61.341 defines "benzene concentration" as "the fraction by weight of benzene in a waste as determined in accordance with the procedures specified in § 61.355 [of Subpart FF]."
- 52. 40 C.F.R. § 61.341 defines "coke by-product recovery plant" as "any facility designed and operated for the separation and recovery of coal tar derivatives (by-products) evolved from coal during the coking process of a coke oven battery."
- 53. 40 C.F.R. § 61.341 defines "point of waste generation" as "the location where the waste stream exits the process unit component or storage tank prior to handling or treatment in an operation that is not an integral part of the production process, or in the case of waste management units that generate new wastes after treatment, the location where the waste stream exits the waste management unit component."
- 54. 40 C.F.R. § 61.341 defines "waste" as "any material resulting from industrial, commercial, mining or agricultural operations, or from community activities that is discarded or is being accumulated, stored, or physically, chemically, thermally, or biologically treated prior to being discarded, recycled, or discharged."

- 55. 40 C.F.R. § 61.341 defines "waste stream" as "the waste generated by a particular process unit, product tank, or waste management unit. The characteristics of the waste stream (e.g., flow rate, benzene concentration, water content) are determined at the point of waste generation. Examples of a waste stream include process wastewater, product tank drawdown, [and] sludge and slop oil removed from waste management units. . . ."
- 56. Pursuant to 40 C.F.R. § 61.355(a), an owner or operator shall determine the total annual benzene (TAB) quantity from facility waste by the following procedure:
 - (1) For each waste stream subject to NESHAP Subpart FF having a flow-weighted annual average water content greater than 10 percent water, on a volume basis as total water, or is mixed with water or other wastes at any time and the resulting mixture has an annual average water content greater than 10 percent as specified in § 61.342(a), the owner or operator shall:
 - (i) determine the annual waste quantity for each waste stream using the procedures specified in § 61.355(b);
 - (ii) determine the flow-weighted annual average benzene concentration for each waste stream using the procedures specified in § 61.355(c); and
 - (iii) calculate the annual benzene quantity for each waste stream by multiplying the annual waste quantity of the waste stream times the flow-weighted annual average benzene concentration;

- (2) The TAB quantity from facility waste is calculated by adding together the annual benzene quantity for each waste stream generated during the year and the annual benzene quantity for each process unit turnaround waste annualized according to § 61.355(b)(4).
- 57. Pursuant to 40 C.F.R. § 61.355(a)(4), if the TAB quantity from facility waste is less than 10 megagrams per year (Mg/yr) but is equal to or greater than 1 Mg/yr, then the owner or operator shall:
 - (i) comply with the recordkeeping requirements of § 61.356 and the reporting requirements of § 61.357 of NESHAP Subpart FF; and (ii) repeat the determination of TAB quantity from facility waste at least once per year and whenever there is a change in the process generating the waste that could cause the TAB quantity from facility waste to increase to 10 Mg/yr or more.
- 58. Pursuant to 40 C.F.R. § 61.355(b), for purposes of the calculation required by § 61.355(a), an owner or operator shall determine the annual waste quantity at the point of waste generation, by one of the methods given in § 61.355(b)(5) through (7), unless otherwise provided in § 61.355(b)(1), (2), (3), and (4).
- 59. Pursuant to 40 C.F.R. § 61.357(c), if the TAB quantity from facility waste is less than 10 Mg/yr but is equal to or greater than 1 Mg/yr, then the owner or operator shall submit to EPA a report that updates the information listed in § 61.357(a)(1) through (3). The report shall be submitted annually and whenever there is a change in the process generating the waste stream that could cause the TAB quantity from facility waste to increase to 10 Mg/yr or more.

Applicable MACT Requirements

- 60. Pursuant to Sections 112 and 114 of the Act, EPA promulgated 40 C.F.R. Part 63, Subpart A, §§ 63.1 through 63.16 (MACT General Provisions). See 59 Fed. Reg. 12,430 (March 16, 1994).
- 61. Pursuant to 40 C.F.R. § 63.1(a)(4), each relevant standard in Part 63 must identify explicitly whether each provision in the MACT General Provisions is or is not included in such relevant standard.
- 62. Pursuant to 40 C.F.R. § 63.1(b)(1), the provisions of 40 C.F.R. Part 63 apply to the owner or operator of any stationary source that:
 - (i) emits or has the potential to emit any HAP listed in or pursuant to Section 112(b) of the Act; and
 - (ii) is subject to any standard, limitation, prohibition, or other federally enforceable requirement established pursuant to Part 63.
- 63. Pursuant to 40 C.F.R. § 63.1(c), if a relevant standard has been established under Part 63, the owner or operator of an affected source must comply with the provisions of that standard, and of the MACT General Provisions as provided in 40 C.F.R. § 63.1(a)(4).
- 64. 40 C.F.R. § 63.2 defines "owner or operator" as "any person who owns, leases, operates, controls, or supervises a stationary source."
- 65. 40 C.F.R. § 63.2 defines "affected source," for the purposes of Part 63, as "the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a [S]ection 112(c) source category or subcategory for which a [S]ection 112(d) standard or other relevant standard is

established pursuant to [S]ection 112 of the Act. Each relevant standard will define the 'affected source,' as defined in [§ 63.2] unless a different definition is warranted. . . ."

66. Pursuant to 40 C.F.R. § 63.6(c), after the effective date of a relevant standard established under 40 C.F.R. Part 63, the owner or operator of an existing source must comply with such standard by the compliance date established by EPA in the applicable subpart(s) of 40 C.F.R. Part 63.

MACT Subpart L

- 67. Pursuant to Sections 112 and 114 of the Act, EPA promulgated the "National Emission Standards for Coke Oven Batteries," 40 C.F.R. Part 63, Subpart L, §§ 63.300 through 63.313 (MACT Subpart L). 58 Fed. Reg. 57,911 (October 27, 1993).
- 68. Pursuant to 40 C.F.R. § 63.300(a), the provisions of MACT Subpart L apply to, among other sources, existing by-product coke oven batteries at a coke plant, on and after the specified dates, unless otherwise specified in MACT Subpart L.
- 69. Pursuant to 40 C.F.R. § 63.300(f), "after October 28, 1992, rules of general applicability promulgated under Section 112 of the Act, including the MACT General Provisions, may apply to coke ovens provided that the topic covered by such a rule is not addressed in [MACT Subpart L]."
- 70. 40 C.F.R. § 63.301 defines "by-product coke oven battery" as "a source consisting of a group of ovens connected by common walls, where coal undergoes destructive distillation under positive pressure to produce coke and coke oven gas, from which by-products are recovered."
- 71. Pursuant to 40 C.F.R. § 63.306(b)(1), the owner or operator shall organize its work practice plan to indicate clearly which parts of the plan pertain to each emission

point subject to visible emission standards under MACT Subpart L. The following provision, among others, shall be addressed in the plan: An initial and refresher training program for all coke plant operating personnel with responsibilities that impact emissions, including contractors, in job requirements related to emission control and the requirements of MACT Subpart L, including work practice requirements. Contractors with responsibilities that impact emission control may be trained by the owner or operator or by qualified contractor personnel; however, the owner or operator shall ensure that the contractor training program complies with the requirements of this section. The training program in the plan must include the specified items in § 63.306(b)(1).

- 72. Pursuant to 40 C.F.R. § 63.308(a), on and after November 15, 1993, the owner or operator of a by-product coke oven battery shall inspect the collecting main for leaks at least once daily according to the procedures in Method 303 in Appendix A to Part 63.
- 73. Pursuant to 40 C.F.R. § 63.308(b), the owner or operator shall record the time and date a leak is first observed, the time and date the leak is temporarily sealed, and the time and date of repair.
- 74. Pursuant to 40 C.F.R. § 63.311(b), the owner or operator of an existing coke oven battery shall provide a written statement(s) to certify compliance to EPA within 45 days of the applicable compliance date for the emission limitations or requirements in MACT Subpart L, which includes the information in § 63.311(b)(1) through (7).

75. Pursuant to 40 C.F.R. § 63.311(d)(3), the owner or operator of a coke oven battery shall include, among other information, the following information in its semiannual compliance certification: a certification, signed by the owner or operator, that work practices were implemented, if applicable, under § 63.306.

Applicable Title V Permitting Requirements

- 76. Section 501 of the Act defines the term "major source" as any stationary source (or any group of stationary sources located within a contiguous area and under common control) that is a major source as defined in either Section 112 of the Act, Section 302 of the Act or part D of subchapter I of the Act.
- 77. Section 502(a) of the Act provides that after the effective date of any permit program approved or promulgated pursuant to title V of the Act, it shall be unlawful for any person to violate any requirement of a permit issued under title V of the Act, or to operate a title V affected source, including a major source or any other source (including an area source) subject to standards or regulations under Section 112 of the Act, except in compliance with a permit issued by a permitting authority under title V of the Act.
- 78. Section 502(d) of the Act requires each State to develop and submit to the Administrator a permit program meeting the requirements of title V of the Act.
- 79. Pursuant to Section 502(e) of the Act, EPA maintains its authority to enforce permits issued by a State.
- 80. Section 503(a) of the Act provides that any source specified in Section 502(a) of the Act shall become subject to a permit program and shall be required to have a permit to operate by the relevant date.

- 81. Section 503(b)(2) of the Act provides that the regulations promulgated pursuant to Section 502(b) shall include requirements that the permittee periodically (but no less frequently than annually) certify that the facility is in compliance with any applicable requirements of the title V permit, and promptly report any deviations from permit requirements to the permitting authority.
- 82. Section 504(a) of the Act provides that each title V permit shall include enforceable emission limitations and standards, a schedule of compliance, a requirement that the permittee submit to the permitting authority, no less often than every 6 months, the results of any required monitoring, and any such conditions as are necessary to assure compliance with applicable requirements of the Act, including the requirements of the applicable state implementation plan (SIP).
- 83. In accordance with Section 502(d)(1) of the Act, New York State (NYS) developed and submitted 6 N.Y.C.R.R. Chapter III, Part 201 (Title V Operating Permit Program), to meet the requirements of title V of the Act and 40 C.F.R. Part 70, promulgated pursuant to Section 502(b) of the Act. This program is a merged title V and State Operating Permit program.
- 84. EPA granted interim approval of the NYS title V Operating Permit Program on December 9, 1996, 61 Fed. Reg. 57,589 (Nov. 7, 1996), and granted full approval of the program on February 5, 2002, 67 Fed. Reg. 5,216 (Feb. 5, 2002).
- 85. 6 N.Y.C.R.R. § 201-6.5(a)(2), a provision in the NYS title V Operating Permit Program, requires that the permittee comply with all conditions of the title V facility permit and provides that any noncompliance constitutes a violation of the Act and is grounds for enforcement action.

- 86. 6 N.Y.C.R.R. § 201-6.5(c)(3), a provision in the NYS title V Operating Permit Program, requires that each title V permit incorporate all applicable federal reporting requirements, which must include, among other things, the following:
 - (i) submittal of reports of any required monitoring at least every 6 months; and
 - (ii) notification and reporting of permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken.
- 87. 6 N.Y.C.R.R. § 201-6.5(e), a provision in the NYS title V Operating Permit Program, requires that each title V permit include, among other things, each of the following:
 - (1) the frequency, not less than annually or more frequent periods as specified in the applicable requirement or by NYSDEC, of submissions of compliance certifications;
 - (2) a means for assessing or monitoring the compliance of the source with its emission limitations, standards, and work practices; and
 - (3) a requirement that the compliance certification include the following:
 - (i) the identification of each term or condition of the permit that is the basis of the certification;
 - (ii) the compliance status;
 - (iii) whether compliance was continuous or intermittent;
 - (iv) the method(s) used for determining the compliance status of the facility, currently and over the reporting period;

- (v) such other facts as NYSDEC shall require to determine the compliance status of the facility; and
- (vi) all compliance certifications shall be submitted to NYSDEC and EPA and shall contain such other provisions as NYSDEC department may require to ensure compliance with all applicable requirements.

Findings of Fact

- 88. Respondent owns and operates an existing coke plant, located at 3875
 River Road in Tonawanda, New York, which is designed and operated for the separation and recovery of coal tar derivatives (by-products) evolved from coal during the coking process of a coke oven battery, among other things. The Facility consists, in part, of a group of ovens connected by common walls, where coal undergoes destructive distillation under positive pressure to produce coke and coke oven gas, from which by-products are recovered.
- 89. On April 30, 2002, the NYS Department of Environmental Conservation (NYSDEC) issued TCC a title V Operating Permit for the Facility, Permit ID # 9-1464-00113/00031, which has an expiration date of May 1, 2007.
- 90. More than 180 days before the expiration of the Facility's title V Operating Permit, TCC submitted to NYSDEC a title V Operating Permit renewal application, under 6 N.Y.C.R.R. § 621.13(a) and Condition 3 of the title V Operating Permit.
- 91. The Facility's title V Operating Permit includes as applicable requirements the NESHAP Subparts L and V, and MACT Subpart L provisions cited to in this Order,

with the exception of 40 C.F.R. §§ 61.132(d) and 61.138(e) of NESHAP Subpart L and 40 C.F.R. § 63.311(b) of MACT Subpart L. The title V Operating Permit does not include as applicable requirements the NESHAP Subpart FF provisions cited to in this Order.

- 92. From April 14 through 21, 2009, EPA and NYSDEC inspectors conducted a full compliance evaluation (Inspection) at the Facility to determine Respondent's compliance with all applicable Clean Air Act requirements.
- 93. On September 1, 2009, pursuant to Section 114 of the Act, EPA issued TCC a request for information, Reference Number CAA-02-2009-1475 (Section 114 Letter), which required TCC to submit information to EPA regarding its operation of the Facility.
- 94. EPA received TCC's response to the Section 114 Letter (Section 114 Response) on October 5, 2009.
- 95. During the Inspection, EPA observed that TCC was operating three unenclosed and unsealed sumps: two tar precipitator sumps and one downcomer sump. These three sumps serve to separate tars and aqueous condensate discharged from the primary cooler.
- 96. During the Inspection, EPA observed that TCC did not duct gases from each sump, referred to in Paragraph 95 above, to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where the benzene in the gas would be recovered or destroyed.
- 97. TCC's Section 114 Response indicated that TCC does not duct gases from each sump, referred to in Paragraph 95 above, to the gas collection system, gas

distribution system, or other enclosed point in the by-product recovery process where the benzene in the gas would be recovered or destroyed.

- 98. During the Inspection, EPA reviewed TCC's coke production records. These records indicated that in 2007 and 2008, more than 25 percent of the coke produced at the Facility was furnace coke.
- 99. During the Inspection, EPA observed that TCC was operating two unenclosed and unsealed weak ammonia-liquor storage tanks at the Facility, and was beginning to operate one additional unenclosed and unsealed weak ammonia-liquor storage tank due to repairs being made at the Facility's ammonia stripper. These three tanks are used to collect or store a flushing liquor solution prior to ammonia or phenol recovery.
- 100. During the Inspection, EPA also observed that TCC operates an unenclosed and unsealed surge tank, and an unenclosed and unsealed ammonia removal system sump, which are used to collect or store a flushing liquor solution prior to ammonia or phenol recovery.
- 101. During the Inspection, EPA reviewed information indicating that, since at least 2007 and continuing through November 20, 2008, TCC operated an unenclosed and unsealed tank or container in the Facility's light-oil system, which was used to collect or store crude or refined light-oil. This information also indicated that TCC's light-oil system was taken out of service on November 20, 2008, and has not been put back into service since that date. TCC's Section 114 Response indicated that TCC installed controls on the light-oil tank or container in early 2009.

- 102. During the Inspection, EPA observed that TCC uses a Foxboro Century OVA-128GC gas chromatograph for equipment leak monitoring. EPA also observed that TCC uses a dilution probe when monitoring components with a 10,000 ppm leak definition (i.e., exhausters).
- 103. During the Inspection, EPA observed TCC personnel perform routine calibration procedures on the Century OVA-128GC.
- 104. During the Inspection, EPA observed that when calibrating the Century OVA-128GC, TCC used a calibration gas mixture of methane in air, with a concentration of 497.8 ppm methane.
- 105. During the Inspection, EPA observed that when calibrating the Century OVA-128GC, TCC does not use a zero air (less than 10 ppm of hydrocarbon in air) calibration gas.
- 106. During the Inspection, EPA observed that when calibrating the Century OVA-128GC, TCC does not use a mixture of methane or n-hexane and air calibration gas with a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
- 107. During the Inspection, EPA observed that the 497.8 ppm methane in air calibration gas used by TCC did not have a specified shelf life.
- 108. During the Inspection, EPA observed that TCC did not calibrate the Century OVA-128GC with a dilution probe in place.
- 109. During the Inspection, EPA requested that TCC calibrate the Century OVA-128GC with a dilution probe in place, using a 10,000 ppm methane in air calibration gas provided by EPA.

- 110. When TCC used the 10,000 ppm methane in air calibration gas that was provided by EPA, along with TCC's dilution probe, the reading on the Century OVA-128GC instrument was approximately 1,500 ppm methane, which is not equal to or less than 10 percent of the methane concentration in the calibration gas.
- 111. During the Inspection, EPA performed field measurements of coke byproduct recovery equipment components, including the exhauster bearing/seal of an
 exhauster identified as exhauster #2, using a toxic vapor analyzer (TVA) instrument.
 On April 17, 2009, a TVA measurement of approximately 60,000 ppm was recorded at
 the exhauster bearing/seal of the exhauster identified as exhauster #2.
- 112. During the Inspection, EPA observed that TCC did not make a first attempt at repair on the exhauster bearing/seal of the exhauster identified as exhauster #2, after detecting the 60,000 ppm concentration.
- 113. TCC's Section 114 Response indicated that TCC did not make a first attempt at repair on the exhauster bearing/seal of the exhauster identified as exhauster #2 within 5 calendar days of detecting the 60,000 ppm concentration.
- 114. During the Inspection, on April 17, 2009, EPA observed that four pieces of equipment at which instrument readings of 10,000 ppm or greater were recorded did not have attached a weatherproof and readily visible identification, marked with the equipment identification number.
- 115. During the Inspection, EPA reviewed a TCC document entitled "Hazardous Air Pollutant Emission Inventory" that indicated that there are 36 valves, 37 flanges and 2 pumps in the light-oil system. This document also indicated that TCC has 35 valves, 1 pressure relief valve and 2 exhausters in the coke oven gas system.

- 116. Records reviewed by EPA during the Inspection, and records submitted in TCC's Section 114 Response, indicated that equipment leak monitoring for pumps and valves containing or contacting a fluid (liquid or gas) that is at least 10 percent benzene by weight was not conducted in the following nine months: April 2008; January, May, July and October 2007; January, April and September 2006; and November 2005.
- 117. During the Inspection, EPA requested, but was not provided, a list of each piece of equipment in benzene service that is subject to NESHAP Subpart L and that is marked with a unique identification to distinguish such equipment from other pieces of equipment in benzene service.
- 118. During the Inspection, EPA observed that TCC did not utilize any unique markings to distinguish various equipment in benzene service.
- 119. During the Inspection, EPA requested, but was not provided, detailed schematics, design specifications, and piping and instrumentation diagrams for control equipment installed to comply with 40 C.F.R. § 61.132 of NESHAP Subpart L.
- 120. In its Section 114 Response, TCC stated that schematics, design specifications, and piping and instrumentation diagrams for Facility control equipment do not exist.
- 121. During the EPA Inspection, EPA observed that TCC does not keep records of its monitoring and visual inspections of the control equipment for the Facility's process vessels, tar storage tanks, and tar-intercepting sumps.
- 122. In its Section 114 Response, TCC stated that records of monitoring and visual inspections of the control equipment for the Facility's process vessels, tar storage tanks, and tar-intercepting sumps for control equipment do not exist.

- 123. During the Inspection, EPA requested documentation that a written statement was submitted to EPA, notifying EPA that the requirements of NESHAP Subparts L and V have been implemented within 90 days of September 14, 1989. TCC provided a copy of a letter submitted to EPA Region 2, dated January 9, 1992.
- 124. During the Inspection, EPA reviewed TCC's January 9, 1992 letter and observed that the letter did not include information regarding the following:
 - a. All Facility sources;
 - b. The type of each source (e.g., a light-oil sump or pump);
 - c. Equipment in benzene service (including equipment identification number and process unit identification, percent by weight benzene in the fluid at the equipment, and process fluid state in the equipment (gas/vapor or liquid)); and
 - d. Method of compliance with the standard for each source.
- 125. During the Inspection, EPA reviewed TCC's semiannual reports covering the period of September 13, 2005 through March 12, 2009 (seven semiannual reporting periods). EPA observed that:
 - a. The reports do not indicate whether there are any visible defects in the source or ductwork;
 - b. The reports do not provide a brief description of any system abnormalities found during the annual maintenance inspection, if one occurred during the reporting period;
 - c. The reports do not provide any information regarding equipment in benzene service or information relevant to 40 C.F.R. § 61.247(b);

- d. The reports do not provide any discussion about the number of exhausters found leaking, if the leaks were repaired, or the results of any performance tests conducted to determine compliance with 40 C.F.R. § 61.135(g) (exhausters designated as no detectable emission sources);
- e. The reports do not contain a statement by the owner or operator stating whether all provisions of 40 C.F.R. Part 61, Subpart L, have been fulfilled during the semiannual reporting period;
- f. The reports covering the 2005 and 2006 reporting period (four reports) do not include the annual coke production of both furnace and foundry coke, when TCC claimed to operate the Facility as a foundry coke by-product recovery plant; and
- g. The reports contain no revisions to TCC's original January 9, 1992 submittal to EPA, although changes have occurred at the Facility (e.g., TCC originally operated three exhausters and subsequently removed one exhauster).
- 126. During the Inspection, and in the Section 114 Letter, EPA requested information from TCC regarding the TAB quantity from waste streams at the Facility.
- 127. During the Inspection, EPA reviewed TCC's original 1990 TAB submittal to EPA and a follow-up letter dated March 18, 1993, which asserted that the Facility's weak liquor stream is the only waste stream subject to NESHAP Subpart FF, and stated that the TAB quantity was 0.456 Mg/yr in 1990.
- 128. During the Inspection, EPA collected benzene waste samples from numerous locations at the Facility. EPA identified the following additional waste

streams that had a flow-weighted annual average water content greater than 10 percent water, on a volume basis as total water, or that were mixed with water or other wastes at any time and the resulting mixture had an annual average water content greater than 10 percent:

- a. Coke oven gas drip leg condensate approximately ten drip leg locations;
- b. Downcomer sump (secondary cooler sump);
- c. Two tar precipitator sumps; and
- d. The ammonia removal system sump.
- 129. During the Inspection, EPA observed that TCC does not determine or document its annual waste quantities at the location where each waste stream exits the process unit component, storage tank or waste management unit component.
- 130. During the Inspection, EPA reviewed the TCC annual emission statements that were submitted to NYSDEC for the years 2004 through 2008. These emission statements indicated that TCC generated greater than 1 Mg/yr of benzene in wastewater, resulting in a TAB quantity of greater than 1 Mg/yr. The emission statements also indicated that the benzene quantity stripped in the ammonia stripper was: 3,692 pounds of benzene in 2008; 2,657 pounds of benzene in 2007; 2,806 pounds of benzene in 2006; 2,403 pounds of benzene in 2005; and 2,426 pounds of benzene in 2004.
- 131. TCC's Section 114 Response and EPA files indicate that TCC has not determined, or reported to EPA, its TAB quantity for at least the last five years (2004 through 2008).

- 132. TCC's Section 114 Response and EPA files indicate that TCC has not submitted to EPA a table that identifies each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with NESHAP Subpart FF, for at least the last five years (2004 through 2008).
- 133. TCC's Section 114 Response and EPA files indicate that TCC has not reported to EPA the following information for each waste stream that is identified as not being controlled for benzene emissions in accordance with NESHAP Subpart FF:
 - a. Whether or not the water content of the waste stream is greater than10 percent;
 - b. Whether or not the waste stream is a process wastewater stream or product tank drawdown;
 - c. Annual waste quantity for the waste stream;
 - d. Range of benzene concentrations for the waste stream;
 - e. Annual average flow-weighted benzene concentration for the waste stream; and
 - f. Annual benzene quantity for the waste stream.
- 134. During the Inspection, EPA requested information from TCC regarding whether and to what extent TCC provides an initial and refresher training program for all coke plant operating personnel with responsibilities that impact emissions, including contractors, in job requirements related to emission control and the requirements of MACT Subpart L, including work practice requirements.
- 135. During the Inspection, a TCC representative stated that only initial training had been provided to coke plant operating personnel and that refresher training has not

been provided.

- 136. During the Inspection, and in the Section 114 Letter, EPA requested information regarding daily inspections for leaks at the Facility collecting main conducted in accordance with the procedures specified in Method 303. TCC provided copies of daily summary sheets for Method 303 inspections, for October 13, 2004 through August 27, 2009.
- 137. During the Inspection, TCC indicated that the Method 303 inspections are conducted by Guardian Environmental Associates, Inc, a consultant to TCC.
- 138. During the Inspection, and as part of EPA's review of the Section 114 Response, EPA reviewed TCC's Method 303 records. The records indicated that leaks were identified at the collecting main on at least 101 days between October 13, 2004 and August 27, 2009: 6 days in 2009; 27 days in 2008; 23 days in 2007; 24 days in 2006; 13 days in 2005; and 8 days in 2004.
- 139. During the Inspection, EPA requested to review TCC records that indicate that the leaks identified at the collecting main were timely repaired. TCC indicated that it has not kept any records of such leak repairs.
- 140. TCC's Section 114 Response also indicated that it has not kept complete records of repairs to the collecting main.
- 141. During the Inspection, EPA requested copies of TCC's initial compliance certification(s) prepared to comply with 40 C.F.R. § 63.311(b). TCC informed EPA that it does not have copies of such initial compliance certification(s).
- 142. During the Inspection, EPA requested copies of TCC's semi-annual compliance certifications prepared to comply with 40 C.F.R. § 63.311(d).

- 143. During the Inspection, TCC provided several semi-annual compliance certifications that did not contain a certification that work practices were implemented as specified in 40 C.F.R. § 63.311(d)(3).
- 144. On July 6, 2009, EPA issued TCC a request for information pursuant to Section 114 of the Act, Reference Number CAA-02-2009-1470 (Section 114 Emission Test Letter), which required TCC to submit emission test protocols for fugitive benzene emission testing (DIAL test) and Facility stack emission testing (stack tests) within 30 days of TCC's receipt of the Section 114 Emission Test Letter.
- 145. Paragraph 2 of the Section 114 Emission Test Letter states, in part, that "[t]he Benzene Test Protocol must be organized in accordance with Enclosure 2 [to the Section 114 Emission Test Letter], and must at a minimum include:
 - a. A requirement to use EPA Other Test Method 10 (OTM-10), differential absorption light detection and ranging technology (DIAL), to measure the mass emission rate of benzene from each process area listed [in Paragraph 2 of the Section 114 Emission Test Letter];
 - b. A requirement to complete at least three (3) sampling runs for each process area. . . , with each run comprised of at least sixty (60) minutes of continuous down-wind measurements within a defined wind vector range;
 - c. A requirement to videotape the emission point(s) for each run of each test with a standard digital video recorder, and with a FLIR video recorder, with time stamps on the video images that are synchronized with each other and with the DIAL instrument time stamps;
 - d. An identification of the operating parameters that are representative of

- normal operation for each process area listed above. Accordingly, for each operating parameter of each such process area, listed in Paragraph 1 [of the Section 114 Emission Test Letter]. . . , TCC must define the ranges of the values that are representative of normal operation of the Facility; and
- e. A requirement that values for all operating parameters must be recorded on as frequent a basis as is feasible but no less frequent than every fifteen (15) minutes for each run. TCC must list all operating parameters that will be monitored and recorded during the benzene testing, and describe how each parameter will be monitored and recorded."
- 146. Paragraphs 8, 9, 14, 15, 20 and 21 of the Section 114 Emission Test
 Letter state, in part, that the protocols for the Facility stack tests "must be organized in
 accordance with Enclosure 2 [to the Section 114 Emission Test Letter]," and that "TCC
 must respond to all deficiencies EPA may identify in the [stack test protocols] within
 seven (7) days of receiving notice of such deficiencies."
- 147. On August 28, 2009, TCC submitted "technical, practical and financial objections" to DIAL testing, and submitted "Compliance Emission Test Protocols" for stack testing at the Facility's boiler #7 stack, ammonia still stack, and main battery underfire/waste heat stack.
- 148. On October 30, 2009, EPA responded to TCC's August 28, 2009 submissions and provided TCC 30 business days to submit an approvable DIAL test protocol, and 20 business days to submit revised stack test protocols that address

EPA's comments.

- among other things, that "[u]pon review of [TCC's] objections, . . . EPA does not believe that TCC provided a basis for excluding the use of DIAL to measure TCC's facility-wide benzene mass emission rate. . . . EPA believes that DIAL, used in the backscatter mode, will provide a reasonable estimate of the TCC facility's overall benzene mass emission rate. EPA's Other Test Methods 10 (OTM-10) refers to the use of DIAL in the path-integrated mode, and provides a basis for using multi-path configurations and wind measurements to determine mass emissions of benzene. . . . Therefore, EPA will approve the use of backscatter DIAL as an alternative to path-integrated DIAL for the measurement of the TCC facility's overall benzene emission rate. The use of backscatter DIAL simplifies the measurement of benzene and requires only the application of the wind measurement parameters described in OTM-10 to derive the mass emission rate. There is no technical barrier to the use of backscatter DIAL to measure the TCC facility's overall benzene emission rate."
- 150. In EPA's October 30, 2009 letter regarding stack testing, in which EPA provided comments on TCC's stack test protocols, EPA stated, among other things, that "[t]he proposed stack testing locations for the boiler #7 stack and the main battery underfire/waste heat stack are not acceptable. TCC must conduct the emissions testing at appropriate locations at the respective stacks. This will ensure that the required emissions sampling, to be conducted at TCC's current operating capacity, will conform to EPA Test Methods."

- 151. In letters dated December 2, 2009, TCC again responded to EPA's Section 114 Emission Test Letter with objections to both DIAL testing and stack testing.
 - 152. To date, TCC has not submitted a DIAL test protocol to EPA.
- 153. To date, TCC has not submitted stack testing protocols that fully address all of EPA's comments.

Conclusions of Law and Findings of Violation

- 154. From the Findings of Fact set forth above, EPA finds that TCC is a person within the meaning of Section 302(e) of the Act.
- 155. From the Findings of Fact set forth above, EPA finds that TCC is the owner and/or operator of an existing furnace coke by-product recovery plant that includes a by-product coke oven battery.
- 156. From the Findings of Fact set forth above, EPA finds that TCC has operated the Facility as a furnace coke by-product recovery plant since 2007 (assuming 6 percent breeze).
- 157. From the Findings of Fact set forth above, EPA finds that TCC is subject to the requirements of NESHAP Subpart L for Benzene Emissions from Coke By-Product Recovery Plants.
- 158. From the Findings of Fact set forth above, EPA finds that TCC is subject to the requirements of NESHAP Subpart V for Equipment Leaks (Fugitive Emission Sources).
- 159. From the Findings of Fact set forth above, EPA finds that TCC is subject to the requirements of NESHAP Subpart FF for Benzene Waste Operations.

- 160. From the Findings of Fact set forth above, EPA finds that TCC is subject to the requirements of MACT Subpart L for Coke Oven Batteries.
- 161. From the Findings of Fact set forth above, EPA finds that TCC is subject to the conditions in its title V Operating Permit.

<u>Violations of NESHAP Subparts L and V, the Facility's title V Operating</u> <u>Permit and Sections 112 and 114 of the Act</u>

- 162. From the Findings of Fact set forth above, EPA finds that TCC failed to enclose and seal all openings on three tar-intercepting sumps operated at the Facility, in violation of 40 C.F.R. § 61.132(a)(1) of NESHAP Subpart L and the Facility's title V Operating Permit, which includes this regulation as an applicable requirement.
- 163. From the Findings of Fact set forth above, EPA finds that TCC failed to duct gases from each process vessel, tar storage tank, and tar-intercepting sump to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where the benzene in the gas will be recovered or destroyed, in violation of 40 C.F.R. § 61.132(a)(2) of NESHAP Subpart L, and the Facility's title V Operating Permit, which includes this regulation as an applicable requirement.
- 164. From the Findings of Fact set forth above, EPA finds that TCC failed to enclose and seal all openings on five excess ammonia-liquor storage tanks at the Facility (three weak ammonia-liquor storage tanks, a surge tank and an ammonia removal system sump), in violation of 40 C.F.R. § 61.132(d) of NESHAP Subpart L.
- 165. From the Findings of Fact set forth above, EPA finds that TCC failed to enclose and seal all openings on a light-oil storage tank at the Facility, from at least 2007 through November 20, 2008, in violation of 40 C.F.R. § 61.132(d) of NESHAP Subpart L.

- 166. From the Findings of Fact set forth above, EPA finds that TCC failed to use a zero air (less than 10 ppm of hydrocarbon in air) calibration gas to calibrate its Century OVA-128GC for equipment leak monitoring, in violation of 40 C.F.R. § 61.135(a) of NESHAP Subpart L and 40 C.F.R. § 61.245(b)(1), (3) and (4)(i) of NESHAP Subpart V, and the Facility's title V Operating Permit, which includes these regulations as applicable requirements.
- 167. From the Findings of Fact set forth above, EPA finds that TCC failed to use a mixture of methane or n-hexane and air calibration gas, with a concentration of approximately, but less than, 10,000 ppm methane or n-hexane, to calibrate its Century OVA-128GC for equipment leak monitoring, in violation of 40 C.F.R. § 61.135(a) of NESHAP Subpart L, 40 C.F.R. § 61.245(b)(1), (3) and (4)(ii) of NESHAP Subpart V, and the Facility's title V Operating Permit, which includes these regulations as applicable requirements.
- 168. From the Findings of Fact set forth above, EPA finds that the calibration gas that TCC used to calibrate its Century OVA-128GC did not have a shelf life specified as required by Method 21, in violation of 40 C.F.R. § 61.135(a) of NESHAP Subpart L, 40 C.F.R. § 61.245(b)(1) of NESHAP Subpart V, and the Facility's title V Operating Permit, which includes these regulations as applicable requirements.
- 169. From the Findings of Fact set forth above, EPA finds that when TCC calibrated its Century OVA-128GC with the dilution probe in place, the calibration precision was not equal to or less than 10 percent of the calibration gas value as specified in Method 21, in violation of 40 C.F.R. § 61.135(a) of NESHAP Subpart L, 40 C.F.R. § 61.245(b)(1) and (3) of NESHAP Subpart V, and the Facility's title V

Operating Permit, which includes these regulations as applicable requirements.

- 170. From the Findings of Fact set forth above, EPA finds that TCC failed to make a first attempt at repair on the exhauster bearing/seal of the exhauster identified as exhauster #2 within 5 calendar days of detecting a leak, in violation of 40 C.F.R. § 61.135(d)(2) of NESHAP Subpart L, and the Facility's title V Operating Permit, which includes this regulation as an applicable requirement.
- 171. From the Findings of Fact set forth above, EPA finds that TCC failed to attach, to four pieces of leaking equipment, a weatherproof and readily visible identification marked with the equipment identification number, in violation of 40 C.F.R. § 61.135(a) of NESHAP Subpart L, 40 C.F.R. § 61.246(b)(1) of NESHAP Subpart V, and the Facility's title V Operating Permit, which includes these regulations as applicable requirements.
- 172. From the Findings of Fact set forth above, EPA finds that TCC failed to conduct monthly equipment leak monitoring for pumps in benzene service for nine months between November 2005 and April 2008, in violation of 40 C.F.R. § 61.135(a) of NESHAP Subpart L, 40 C.F.R. § 61.242-2(a)(1) of NESHAP Subpart V, and the Facility's title V Operating Permit, which includes these regulations as applicable requirements.
- 173. From the Findings of Fact set forth above, EPA finds that TCC failed to conduct monthly equipment leak monitoring for valves in benzene service for nine months between November 2005 and April 2008, in violation of 40 C.F.R. § 61.135(a) of NESHAP Subpart L, 40 C.F.R. § 61.242-7(a) of NESHAP Subpart V, and the Facility's title V Operating Permit, which includes these regulations as applicable

requirements.

- 174. From the Findings of Fact set forth above, EPA finds that TCC failed to mark each piece of equipment in benzene service that is subject to NESHAP Subpart L in such a manner that it can be distinguished readily from other pieces of equipment in benzene service, in violation of 40 C.F.R. § 61.135(c) of NESHAP Subpart L, and the Facility's title V Operating Permit, which includes this regulation as an applicable requirement.
- 175. From the Findings of Fact set forth above, EPA finds that TCC failed to record and keep, in a readily accessible location, detailed schematics, design specifications, and piping and instrumentation diagrams pertaining to the design of control equipment installed to comply with 40 C.F.R. § 61.132, in violation of 40 C.F.R. § 61.138(a)(1) of NESHAP Subpart L, and the Facility's title V Operating Permit, which includes this regulation as an applicable requirement.
- 176. From the Findings of Fact set forth above, EPA finds that TCC failed to keep records of monitoring and visual inspections of the control equipment or system(s) installed for the Facility's process vessels, tar storage tanks, and tar-intercepting sumps, in violation of 40 C.F.R. § 61.138(b) of NESHAP Subpart L, and the Facility's title V Operating Permit, which includes this regulation as an applicable requirement.
- 177. From the Findings of Fact set forth above, EPA finds that TCC failed to submit to EPA a complete and adequate written statement notifying EPA that the requirements of 40 C.F.R. Part 61, Subpart L and Subpart V have been implemented, in violation of 40 C.F.R. § 61.138(e)(1) and (4) of NESHAP Subparts L, and the Facility's title V Operating Permit, which includes this regulation as an applicable

requirement.

- 178. From the Findings of Fact set forth above, EPA finds that the semiannual reports submitted by TCC from September 13, 2005 through March 12, 2009 (seven semiannual reporting periods) did not contain all of the information specified in 40 C.F.R. § 61.138(f)(1) through (6), in violation of § 61.138(f) of NESHAP Subpart L, and the Facility's title V Operating Permit, which includes this regulation as an applicable requirement.
- 179. From the Findings of Fact and Conclusions of Law set forth above, EPA finds that each of TCC's violations of NESHAP Subparts L and V are violations of Section 112 of the Act.
- 180. From the Findings of Fact and Conclusions of Law set forth above, EPA finds that TCC's violations of 40 C.F.R. §§ 61.135(a), 61.138(a)(1), 61.138(b), 61.138(e)(1) and (4) and 61.138(f)(1) through (6) of NESHAP Subpart L, and violations of 40 C.F.R. §§ 61.242-2(a)(1), 61.242-7(a) and 61.245(b)(1), (3) and (4) of NESHAP Subpart V, are also violations of Section 114 of the Act.

<u>Violations of NESHAP Subpart FF, Sections 112 and 114 of the Act and Title V of the Act</u>

- 181. From the Findings of Fact set forth above, EPA finds that TCC had greater than 1 Mg/yr of benzene in the wastewater sent to the ammonia stripper for at least the past five years (2004 through 2008).
- 182. From the Findings of Fact set forth above, EPA finds that the TAB reports prepared by TCC for NESHAP Subpart FF did not include all of the benzene waste streams at the facility, in violation of 40 C.F.R. § 61.355(a) of NESHAP Subpart FF.

- 183. From the Findings of Fact set forth above, EPA finds that TCC failed to determine the annual waste quantity at the point of generation of each waste stream, by one of the methods in 40 C.F.R. § 61.355(b)(5) through (7), in violation of 40 C.F.R. § 61.355(b) of NESHAP Subpart FF.
- 184. From the Findings of Fact set forth above, EPA finds that TCC failed to submit to EPA, for at least the past five years (2004 through 2008), an annual report that includes all of the information required by 40 C.F.R. § 61.357(a)(1) through (3) (e.g., TAB quantity from Facility waste), in violation of 40 C.F.R. §§ 61.355(a)(4)(i) and 61.357(c) of NESHAP Subpart FF.
- 185. From the Findings of Fact and Conclusions of Law set forth above, EPA finds that each of TCC's violations of NESHAP Subpart FF are violations of Section 112 of the Act.
- 186. From the Findings of Fact and Conclusions of Law set forth above, EPA finds that TCC's violations of 40 C.F.R. §§ 61.355(a) and 61.357(c) of NESHAP Subpart FF are also violations of Section 114 of the Act.
- 187. From the Findings of Fact and Conclusions of Law set forth above, EPA finds that the Facility's title V Operating Permit did not include the applicable requirements of NESHAP Subpart FF, in violation of Section 504(a) of the Act.

<u>Violations of MACT Subpart L, the Facility's Title V Operating Permit and Sections 112 and 114 of the Act</u>

188. From the Findings of Fact set forth above, EPA finds that TCC failed to provide refresher training for all coke plant operating personnel, in violation of 40 C.F.R. § 63.306 of MACT Subpart L, and the Facility's title V Operating Permit, which includes this regulation as an applicable requirement.

- 189. From the Findings of Fact set forth above, EPA finds that TCC failed to record and maintain records of the time and date a collection main leak is temporarily sealed, and the time and date of repair of a collection main leak, on at least 101 occasions between October 13, 2004 and August 27, 2009, in violation of 40 C.F.R. § 63.308(b) of MACT Subpart L, and the Facility's title V Operating Permit, which includes this regulation as an applicable requirement.
- 190. From the Findings of Fact set forth above, EPA finds that TCC failed to submit to EPA an initial compliance certification(s) within 45 days of the applicable compliance date(s), in violation of 40 C.F.R. § 63.311(b) of MACT Subpart L.
- 191. From the Findings of Fact set forth above, EPA finds that TCC failed to submit to EPA complete semi-annual compliance reports that included information relating to work practice implementation, in violation of 40 C.F.R. § 63.311(d)(3) of MACT Subpart L, and the Facility's title V Operating Permit, which includes this regulation as an applicable requirement.
- 192. From the Findings of Fact and Conclusions of Law set forth above, EPA finds that each of TCC's violations of MACT Subpart L are violations of Section 112 of the Act.
- 193. From the Findings of Fact and Conclusions of Law set forth above, EPA finds that TCC's violations of 40 C.F.R. §§ 63.308(b), 63.311(b) and 63.311(d)(3) of MACT Subpart L are also violations of Section 114 of the Act.

Additional Violations of Section 114 of the Act

194. From the Findings of Fact set forth above, EPA finds that TCC failed to comply with EPA's Section 114 Emission Test Letter by failing to submit a test protocol

for fugitive benzene emission testing (DIAL test) when it resubmitted objections to EPA on December 2, 2009, in violation of Section 114 of the Act.

195. From the Findings of Fact set forth above, EPA finds that TCC failed to comply with EPA's Section 114 Emission Test Letter with regard to the stack testing protocols when it resubmitted the test protocols to EPA on December 2, 2009, with objections that failed to respond to all deficiencies identified by EPA, in violation of Section 114 of the Act.

Additional Violations of the Facility's Title V Operating Permit and Title V of the Act, and Violations of the NYS Title V Operating Permit Program

- 196. From the Findings of Fact and Conclusions of Law set forth above, EPA finds that TCC failed to report in its title V Operating Permit annual compliance certifications for 2005 through 2009 the violations of NESHAP Subparts L and V, and MACT Subpart L that occurred from 2005 through 2009, in violation of its title V Operating Permit, which included, as an applicable requirement, the annual compliance certification requirement pursuant to 6 N.Y.C.R.R. § 201-6.5(e), a provision of the NYS title V Operating Permit Program developed pursuant to Section 503(b)(2) of the Act.
- 197. From the Findings of Fact and Conclusions of Law set forth above, EPA finds that TCC failed to identify in its title V Operating Permit semi-annual deviation reports from 2005 through 2009 the violations of NESHAP Subparts L and V, and MACT Subpart L that occurred from 2005 through 2009, in violation of its title V Operating Permit, which included, as an applicable requirement, the semi-annual deviation reporting requirement pursuant to 6 N.Y.C.R.R. § 201-6.5(c)(3)(ii), a provision of the NYS title V Operating Permit Program developed pursuant to Section 504(a) of the Act.

198. From the Findings of Fact and Conclusions of Law set forth above, EPA finds that each of TCC's violations of the Facility's title V Operating Permit are violations of the NYS title V Operating Permit Program and title V of the Act.

Order

In concurrence with the Findings of Fact and Conclusions of Law above, pursuant to Section 113(a)(3) of the Act, IT IS DETERMINED AND ORDERED that:

I

The provisions of this Order shall apply to Respondent and to its officers, agents, servants, employees, successors and to all persons, firms and corporations acting pursuant to, through or for Respondent. Respondent shall comply with each provision of this Order as expeditiously as practicable, but in no event later than the dates specified below. Each provision of this Order shall be independently enforceable under Section 113 of the Act, 42 U.S.C. § 7413.

II.

Within 15 days after the effective date of this Order, Respondent shall enclose and seal all openings at each of its three tar-intercepting sumps, to comply with 40 C.F.R. § 61.132(a) and the condition in the Facility's title V Operating Permit that includes this regulation as an applicable requirement.

III.

Within 15 days after the effective date of this Order, Respondent shall enclose and seal all openings at each of its five excess ammonia liquor storage tanks, to comply

with 40 C.F.R. § 61.132(d), and shall ensure that its pending title V Operating Permit renewal application identifies this regulation as an applicable requirement.

IV.

Within 15 days after the effective date of this Order, Respondent shall submit to EPA documentation that demonstrates that its light-oil storage tank is in compliance with the requirements in 40 C.F.R. § 61.132(c) and (d).

V

Within 30 days after the effective date of this Order, Respondent shall duct gases from each tar-intercepting sump and excess ammonia-liquor storage tank to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where the benzene in the gas would be recovered or destroyed, to comply with 40 C.F.R. § 61.132(a)(2) and the condition in the Facility's title V Operating Permit that includes this regulation as an applicable requirement.

VI.

Within 15 days after the effective date of this Order, Respondent shall develop procedures for the proper calibration and operation of monitoring equipment that complies with the requirements of Method 21 as specified in NESHAP Subparts L and V, and implement such procedures prior to conducting monitoring for equipment leaks, to comply with 40 C.F.R. § 61.135(a) and 40 C.F.R. § 61.245(b)(3) and (4) and the conditions in the Facility's title V Operating Permit that include these regulations as applicable requirements.

Within 15 days after the effective date of this Order, Respondent shall establish and implement a procedure to identify and properly mark all leaking equipment, to comply with 40 C.F.R. § 61.135(a) and 40 C.F.R. § 61.246(b)(1) and the conditions in the Facility's title V Operating Permit that include these regulations as applicable requirements.

VIII.

Within 15 days after the effective date of this Order, Respondent shall comply with monthly monitoring requirements for all pumps and valves in benzene service, in accordance with 40 C.F.R. § 61.135(a) and 40 C.F.R. §§ 61.242-2(a)(1) and 61.242-7(a) and the conditions in the Facility's title V Operating Permit that include these regulations as applicable requirements.

IX.

Within 15 days after the effective date of this Order, Respondent shall establish and implement procedures to identify and properly mark all pieces of equipment in benzene service, to comply with 40 C.F.R. § 61.135(c) and the condition in the Facility's title V Operating Permit that includes this regulation as an applicable requirement.

Χ.

Within 30 days after the effective date of this Order, Respondent shall develop, and submit to EPA, detailed schematics, design specifications, and piping and instrumentation diagrams for control equipment installed to comply with 40 C.F.R. §§ 61.132 through 61.134, in accordance with 40 C.F.R. §§ 61.138(a) and the condition

in the Facility's title V Operating Permit that includes this regulation as an applicable requirement.

XI.

By the effective date of this Order, Respondent shall comply with the recordkeeping requirements in 40 C.F.R. § 61.138(b), and the condition in the Facility's title V Operating Permit that includes this regulation as an applicable requirement, and shall maintain records for five years in accordance with the Facility's title V Operating Permit.

XII.

Within 15 days of the effective date of this Order, Respondent shall submit to EPA all of the information required by 40 C.F.R. § 61.138(e), including the information in § 61.138(e)(4)(i) through (iii).

XIII.

By the effective date of this Order, Respondent shall ensure that each future semiannual report submitted to EPA under NESHAP Subpart L contains all of the information required by 40 C.F.R. § 61.138(f)(1) through (6) and the condition in the Facility's title V Operating Permit that includes this regulation as an applicable requirement.

XIV.

Within 30 days after the effective date of this Order, Respondent shall comply with all of the test methods, procedures, and compliance provisions of 40 C.F.R. § 61.355, and shall ensure that its pending title V Operating Permit renewal application identifies this regulation as an applicable requirement.

Within 45 days of the effective date of this Order, Respondent shall submit to EPA a report that includes all of the information specified in 40 C.F.R. § 61.357(a), and shall ensure that all future annual TAB quantity reports include all the information specified in § 61.357(a)(1) through (3), to comply with 40 C.F.R. § 61.357(c). In addition, Respondent shall ensure that its pending title V Operating Permit renewal application identifies this regulation as an applicable requirement.

XVI.

Within 30 days after the effective date of this Order, Respondent shall implement the refresher training program in its work practice plan for all coke plant operating personnel, to comply with 40 C.F.R. § 63.306 and the condition in the Facility's title V Operating Permit that includes this regulation as an applicable requirement.

XVII.

Within 30 days after the effective date of this Order, Respondent shall submit to EPA an initial compliance certification that includes all of the information required by 40 C.F.R. § 63.311(b).

XVIII.

By the effective date of this Order, Respondent shall ensure that each future semiannual compliance certification report submitted to EPA under MACT Subpart L contains all of the information required by 40 C.F.R. § 63.311(d), including the information required by 40 C.F.R. § 63.311(d)(3), and required by the condition in the Facility's title V Operating Permit that includes this regulation as an applicable requirement.

XIX.

Within 30 days after the effective date of this Order, Respondent shall submit to EPA a fugitive benzene emission test (DIAL test) protocol as required by and in accordance with EPA's Section 114 Emission Test Letter.

XX.

Within 30 days after the effective date of this Order, Respondent shall submit to EPA revised stack test protocols that fully address all of EPA's written comments as required by and in accordance with EPA's Section 114 Emission Test Letter.

XXI.

All documents, reports, and results required by this Order shall be submitted to:

Kenneth Eng, Chief Air Compliance Branch Division of Enforcement and Compliance Assistance U.S. Environmental Protection Agency - Region 2 290 Broadway - 21st Floor New York, New York 10007-1866

Business Confidentiality

Respondent may assert a business confidentiality claim covering part or all of the information this Order requires only to the extent and in the manner described in 40 C.F.R. § 2.203. EPA will disclose information submitted under a confidentiality claim only as provided in 40 C.F.R. Part 2, Subpart B. See 41 Fed. Reg. 36,902 (1976). If Respondent does not assert a confidentiality claim, EPA may make the information available to the public without further notice to Respondent.

Enforcement

Section 113(a)(3) of the Act authorizes EPA to take any of the following actions in response to Respondent's violation(s) of the Act:

- bring a civil judicial action pursuant to Section113(b) of the Act for injunctive relief and/or civil penalties up to \$25,000 per day for each violation, and adjust the maximum penalty provided by the Act up to \$27,500 per day for each violation that occurs from January 30, 1997 through March 14, 2004; \$32,500 per day for each violation that occurs from March 15, 2004 through January 12, 2009; and \$37,500 per day for each violation that occurs after January 12, 2009, in accordance with the Debt Collection Improvement Act, 31 U.S.C. 3701 et seq. (DCIA), and 40 C.F.R. Part 19, promulgated pursuant to the DCIA; or
- issue an administrative penalty order pursuant to Section 113(d) of the Act, for civil penalties, and adjust these penalties in accordance with the DCIA and Part 19, as stated above.

Failure to comply with this Order may result in an administrative or civil action for appropriate relief as provided in Section 113 of the Act. EPA retains full authority to enforce the requirements of the Act, for all periods of noncompliance including those covered in this Order, and nothing in this Order shall be construed to limit that authority. Furthermore, the United States may seek fines and/or imprisonment of any party who knowingly violates the Act or an Order issued pursuant to Section 113 of the Act. Upon conviction, any facility owned by such party may be declared ineligible for federal contracts, grants and loans. See Section 306 of the Act; 40 C.F.R. Part 15; and Executive Order 11,738.

Penalty Assessment Criteria

Section 113(e)(1) of the Act provides that if a penalty is assessed pursuant to Section 113 of the Act, EPA or the court, as appropriate, shall, in determining the

amount of the penalty to be assessed, take into consideration the size of the business, the economic impact of the penalty on the business, the violator's full compliance history and good faith efforts to comply, the duration of the violation as established by any credible evidence (including evidence other than the applicable test method), payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, the seriousness of the violation, and other factors as justice may require.

Section 113(e)(2) of the Act allows EPA or the court, as appropriate, to assess a penalty for each day of violation. In accordance with Section 113(e)(2) of the Act, EPA will consider a violation to continue from the date the violation began until the date. Respondent establishes that it has achieved continuous compliance. If Respondent proves that there was an intermittent day of compliance or that the violation was not continuous in nature, then EPA will reduce the penalty accordingly.

Effective Date and Opportunity for Conference

Pursuant to Section 113(a)(4) of the Act, Respondent may request a conference with EPA concerning the violation(s) alleged in this Order. This conference will enable Respondent to present evidence bearing on the finding of violation(s), on the nature of the violation(s), and on any efforts it may have taken or it proposes to take to achieve compliance. Respondent may arrange to have legal counsel.

Respondent's request for a conference must be confirmed in writing within ten (10) days of receipt of this Order. If the requested conference is held, the Order shall become effective ten (10) days after the conference is held.

If Respondent does not request a conference within ten (10) days of its receipt of this Order, the Order shall become effective ten (10) days from receipt. The request for a conference, or other inquiries concerning this Order, should be made in writing to:

Erick R. Ihlenburg
Office of Regional Counsel – Air Branch
U.S. Environmental Protection Agency – Region 2
290 Broadway – 16th Floor
New York, NY 10007-1866
(212) 637-3250

Notwithstanding the effective date of this Order and opportunity for conference, Respondent must comply with all applicable requirements of the Act.

Issued: JANUART 7, 2010

Dore LaPosta, Director

Division of Enforcement and Compliance Assistance U.S. Environmental Protection Agency - Region 2

To: Mr. James D. Crane, Owner & CEO Tonawanda Coke Corporation 3875 River Road Tonawanda, New York 14150-6507

Mr. Mark L. Kamholz, Manager—Environmental Control Tonawanda Coke Corporation 3875 River Road Tonawanda, New York 14150-6507

cc: Mr. Robert J. Stanton, P.E., Director
New York State Department of Environmental Conservation
Division of Air Resources
Bureau of Stationary Sources
625 Broadway, 2nd Floor
Albany, New York 12233-3254

Ms. Colleen McCarthy, Senior Counsel New York State Department of Environmental Conservation Bureau of Air Resources 625 Broadway, 14th Floor Albany, New York 12233-5500

Mr. Larry Stizman, RAPCE
New York State Department of Environmental Conservation
Region 9
270 Michigan Avenue
Buffalo, New York 14203-2999

Ms. Maureen Brady, Associate Counsel, Legal Affairs New York State Department of Environmental Conservation Region 9 270 Michigan Avenue Buffalo, New York 14203-2999